

POPULATION SERVED BY COMMUNITY DRINKING WATER SYSTEMS EXCEEDING LEAD ACTION LEVELS

What does the indicator tell us?

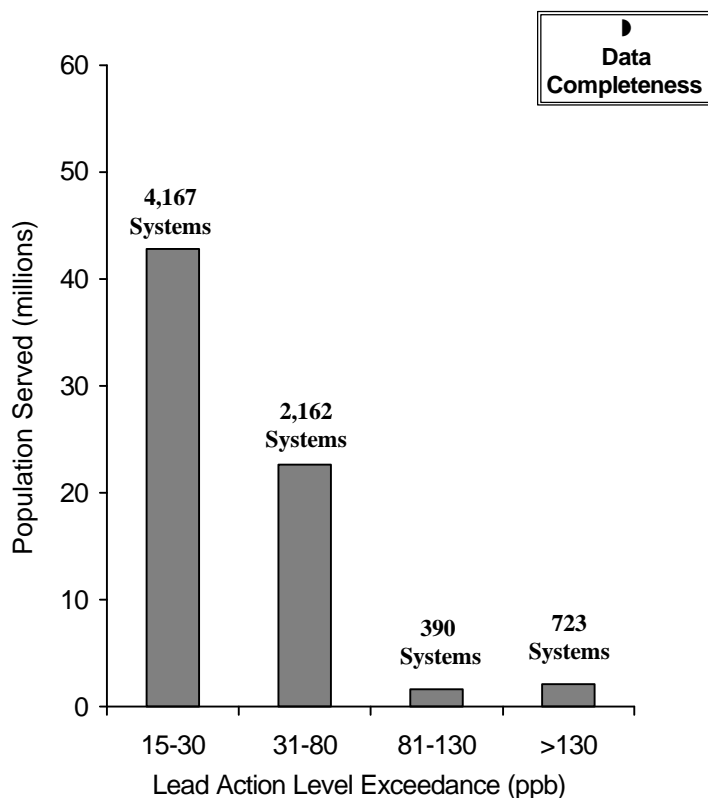
This indicator measures the population provided water by community water systems that have exceeded lead action levels and are required to take corrective action. It is not a precise predictor of the risk of exposure to the general population provided water by the targeted water systems. The monitoring results reflect the situation in only the worst portions of the distribution system and represent only the relative probability of risk for consumers of those targeted water systems.

Based on the results of lead monitoring through fiscal year 1995, 69.1 million people were provided drinking water by water systems that exceeded the action level of 15 parts per billion (ppb) at least once. Of that number, 42.8 million people were provided water by systems where sampling results showed lead levels between 15 and 30 ppb, and 26.3 million people received water from systems where sampling results showed lead levels over 30 ppb, which EPA views as a significant exceedance. About 2.1 million people received water from water systems where sampling results showed lead levels greater than 130 ppb. Higher exceedances increase the probability that people consuming water are at risk.

How will the indicator be used to track progress?

EPA, under its Lead and Copper Rule, requires that water systems follow a series of steps to reduce the likelihood of lead entering the drinking water from distribution system materials. Water systems are required to monitor for lead in their distribution systems and

INDICATOR 3: Population Served by Community Drinking Water Systems Exceeding Lead Action Levels



Source: State data in EPA Safe Drinking Water Information System, 1995

to take action when lead in more than 10 percent of the samples taken at the tap exceeds the regulatory action level of 15 ppb. Depending on the size and type of the system, actions range from establishing a public education program to implementing corrosion control treatment or replacing lead pipes. EPA requires large systems to install lead controls regardless of sampling results. The lead monitoring data for water systems exceeding the lead action level are contained in EPA's Safe Drinking Water Information System (SDWIS).

What is being done to improve the indicator?

Data quality and the process used to report on drinking water system regulatory compliance are critical factors in determining the quality of this indicator. This indicator measures the results of lead monitoring required under the Lead and Copper Rule. It shows exceedances of an action level defined in the rule to trigger additional actions. It is not in itself an indicator of a drinking water standard violation. The quality and completeness of the data for this indicator is questionable in some states.

In an effort to improve the indicator, EPA and the states are jointly pursuing a modernization initiative to upgrade and improve their drinking water information systems. EPA is replacing the Federal Reporting Data System with the Safe Drinking Water Information System. States are now testing the first components of SDWIS, which will improve both data quality and reporting of violations. With the cooperation of the states, EPA will be able to use SDWIS to improve the oversight and management of drinking water programs.

The objective of the SDWIS modernization is to improve the accessibility and quality of the drinking water data that EPA and states provide to the public. The new system will make reporting of lead monitoring results more efficient and data validation more complete.

What is being done to improve conditions measured by the indicator?

EPA estimates that 20 percent of human exposure to lead is attributable to lead in drinking water. Lead enters the drinking water through pipes in the distribution system, lead service lines, and household plumbing, including faucets and other fixtures. Lead in drinking water, however, is controllable through actions taken by water systems and their customers. Under the Lead and Copper Rule, EPA has established a series of steps that water systems must take to reduce the likelihood of lead entering drinking water from distribution system materials. These steps include corrosion control treatment and lead service line replacement.

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